

Commonwealth of Virginia VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

4949-A Cox Road, Glen Allen, Virginia 23060 (804) 527-5020 FAX (804) 698-4178 www.deq.virginia.gov

Travis A. Voyles Acting Secretary of Natural and Historic Resources Michael S. Rolband, PE, PWD, PWS Emeritus Director (804) 698-4000

> James Golden Regional Director

DRAFT

Mr. Shane Walker Area President BFI Waste Systems of Virginia, LLC Old Dominion Landfill 2001 Charles City Road Richmond, Virginia 23231

> Location: Henrico County Registration No.: 51227

Dear Mr. Walker:

Attached is a renewal to your permit to operate your municipal solid waste landfill pursuant to 9 VAC 5 Chapter 80, Article 1, of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from your minor new source review permit dated October 8, 2021.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on October 8, 2021 and solicited written public comments by placing an advertisement in the Richmond Times Dispatch newspaper on April 6, 2022. The thirty-day comment period (provided for in 9 VAC 5-80-270) expired on XX, 2022.

This permit approval shall not relieve BFI Waste Systems of Virginia, LLC of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests. Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually

received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Director
Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218-1105

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia, at http://www.courts.state.fa.us/courts/scv/rules.html, for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact the regional office at 804-527-5020.

Sincerely,

James E. Kyle, P.E. Air Permit Manager

Attachment: Permit

c: U.S. EPA, Region III (via email)
DEQ electronic file database (ECM)



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Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: BFI Waste Systems of Virginia, LLC
Facility Name: Old Dominion Landfill - Henrico County
Facility Location: 2001 Charles City Road, Richmond, Virginia

Registration Number: 51227

Permit Number: PRO-51227

This permit includes the following programs: Federally Enforceable Requirements - Clean Air Act

XX, 2022 DRAFT
Effective Date

XX, 2027 DRAFT Expiration Date

Regional Air Permit Manager

XX, 2022 DRAFT Signature Date

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Old Dominion Landfill
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Facility Information Permittee

BFI Waste Systems of Virginia, LLC 2001 Charles City Rd Richmond, VA 23231

Responsible Official

Mr. Shane Walker Area President

Facility

Old Dominion Landfill 2001 Charles City Rd Henrico, VA 23231

Contact Person

Mr. Tim Torrez, P.E. Environmental Manager 804-749-3805

County Plant ID No.: 51-087-0209

Facility Description: NAICS: 562212. This facility currently consists of a municipal solid waste landfill, gas collection and control system (GCCS) and leachate storage transfer/storage system associated with the landfill. The landfill accepts household and commercial waste, construction/demolition material, and industrial, and non-hazardous special wastes. The site includes an active landfill (Solid Waste Permit No. 553) and a closed landfill (Solid Waste Permit No. 129) formerly operated as Registration #51069 (Charles City Road Landfill).

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Emission Units

Process equipment to be operated consists of:

Landfill

Emission	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution	PCD ID	Pollutant	Applicable Permit
Unit ID				Control Device		Controlled	Date
				(PCD)			
				Description			
01 [P01]	L01	Closed MSW landfill	4,898,400 cu yds	Open flare	PCD-05	Odor	October 8, 2021
		(Charles City Rd Landfill	3,900,000 megagrams				
		Solid Waste Permit 129) –					
		not subject to NSPS/EG					
		GCCS requirements.					
01 [P01]	L02	Active MSW landfill (Solid	35,696,679 cu yds	Two John Zink	PCD-01	NMOC,	October 8, 2021
		Waste Permit 553)	28,420,923 megagrams	open flares	PCD-02	VOC, and	
						HAPs.	

Fuel Burning Equipment – Flares and engine

Emission	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution	PCD ID	Pollutant	Applicable Permit
Unit ID				Control Device		Controlled	Date
				(PCD)			
				Description			
PCD-01	F-1	Open Flare System	115.5 MMBtu/hr	None	None	None	October 8, 2021
		(John Zink or equivalent)	3,500 scfm				
PCD-02	F-2	Open Flare System	115.5 MMBtu/hr	None	None	None	October 8, 2021
		(John Zink or equivalent)	3,500 scfm				
PCD-05	F-3	Open Flare System (odor	36.75 MMBtu/hr	None	None	None	October 8, 2021
		control)	1,200 scfm				
EG-5	EDG-5	Emergency Diesel Generator	250 kW, 372 bhp	None	None	None	None
		(2008)					

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Landfill Surface & Roads

Emission	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution	PCD ID	Pollutant	Applicable Permit
Unit ID				Control Device		Controlled	Date
				(PCD)			
				Description			
03	Fugitive	Active Landfill Operations	N/A	Wet	None	PM, PM ₁₀ ,	October 8, 2021
		& Haul Roads		Suppression		$PM_{2.5}$	

^{*}The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

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Landfill Requirements

(Emission Unit ID# P01-L01, P01-L02)

Limitations

1. Landfill Requirements - (Emission Unit ID# P01-L01 & P01-L02) - Limitations - The total design capacity of the municipal solid waste landfill, which includes Phases 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and the Phase II lateral expansion are combined as 35,696,679 cubic yards or 28,420,923 megagrams from Solid Waste Permit No. 553 (P01-L02) and 4,898,400 cubic yards or 3,900,000 megagrams from closed Solid Waste Permit No. 129 (P01-L01). This MSW landfill shall not accept more than the combined maximum total, in millions of megagrams of municipal solid waste for disposal, over the life of the landfill. An increase to this maximum amount of waste accepted by the landfill may require a new or amended permit.

(9 VAC 80-110 and Condition 1 of the NSR permit dated 10/08/2021)

- 2. **Landfill Requirements (Emission Unit ID# P01-L02) Requirements by Reference -**Except where this permit is more restrictive than the applicable requirement, the MSW landfill shall be constructed and operated in compliance with the applicable requirements of 40 CFR 63, MACT Subpart AAAA.

 (9 VAC 80-110)
- 3. Landfill Requirements (Emission Unit ID# P01-L02) Requirements by Reference Except where this permit is more restrictive than the applicable requirement, the MSW landfill shall be constructed and operated in compliance with the applicable requirements of 40 CFR 60, NSPS Subpart XXX [Permitting Note: Old Dominion began complying with the more stringent revised requirements of MACT AAAA on September 27, 2021. Compliance with the major compliance provisions of MACT AAAA ensures compliance with analogous provisions of NSPS XXX]

 (9 VAC 80-110 and Condition 15 of the NSR permit dated 10/08/2021)
- 4. Landfill Requirements (Emission Unit ID# P01-L02) Limitations LFG Collection and Control System The permittee shall operate the active landfill gas (LFG) collection and control system subject to NSPS XXX and MACT AAAA in the following manner:
 - a. 40 CFR 60.762(b)(2)(ii)(C)(1)and (C)(3) [and 40 CFR 63.1959(b)(2)(ii)(B)(1) and (B)(3)]: Design the system to handle the maximum expected collected gas flow rate from Phases 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and the Phase II lateral expansion that has been calculated to be 3,779,589,600 cubic feet per year, using the procedures listed in 40 CFR 60.764(a)(1) [and 40 CFR 63.1959(a)(1)]. The maximum expected gas flow rate shall be recalculated when design capacity is increased or additional cells other than those listed are proposed for landfill expansion and the LFG system shall be redesigned to handle the maximum expected gas flow rate from the entire area of the landfill;

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- b. 40 CFR 60.762(b)(2)(ii)(C)(2) [and 40 CFR 63.1959(b)(2)(ii)(B)(2)]: Collect gas from each area, cell or group of cells in which initial solid waste has been in place for a period of:
 - i. 5 years or more if active;
 - ii. 2 years or more if closed or at final grade;
- c. 40 CFR 60.762(b)(2)(iii)(C)(4) [and 40 CFR 63.1959(b)(2)(iii)(C): Route the collected LFG to a treatment system that processes the collected gas for subsequent sale or beneficial use such as fuel for combustion, production of vehicle fuel, production of high-Btu gas for pipeline injection, or use as a raw material in a chemical manufacturing process. Venting of treated LFG to the ambient air is not allowed.
- d. 40 CFR 60.762(b)(2)(iii)(A) [and 40 CFR 63.1959(b)(2)(iii)(A)]: Control LFG emissions by routing the collected LFG to the John Zink (or equal) open flares (PCD-01 and PCD-02).

A change in the control system to those listed in items e, f, and g may require a permit to modify and operate.

- e. 40 CFR 60.762(b)(2)(i) [and 40 CFR 63.1959(b)(2)(i)]: Submit a LFG collection and control system design plan meeting the requirements of 40 CFR 60.767(c) to the Piedmont Regional Office within one year after the first annual report in which the NMOC emission rate is greater than or equal to 34 Mg per year, [and, if the NMOC emission rate is calculated to be equal to or greater than 50 Mg per year, submit a LFG collection and control system design plan, as specified in 40 CFR 63.1981(d), to the Piedmont Regional Office within one year]. Revisions to the LFG collection and control system design plan must be completed in accordance with 40 CFR 60.767(d) [and 40 CFR 63.1981(e)] [Permitting note: Old Dominion has already submitted a design plan in accordance with 40 CFR 60.762(b)(2)(i) to satisfy this condition].
- f. 40 CFR 60.762(b)(2)(ii) and (iii) [and 40 CFR 63.1959(b)(2)(ii) and (iii)]: Install a gas collection and control system in compliance with 40 CFR 60.762(b)(2)(ii) and (iii) [and 40 CFR 63.1959(b)(2)(ii) and (iii)] within 30 months after the applicable report pursuant to 40 CFR 60.762(b)(2)(ii)(A) or (B), [Permitting note: Old Dominion has already installed a gas collection and control system in accordance with 40 CFR 60.762(b)(2)(ii) and (iii) to satisfy this condition] and
- g. 40 CFR 60.762(b)(2)(iv) [and 40 CFR 63.1957(a)]: Operate the installed gas collection and control device in compliance with 40 CFR 60.763, 60.765, and 60.766 [and 40 CFR 63.1958, 63.1960, and 63.1961].

The gas collection and control system may be removed if the provisions of 40 CFR 60.762(b)(2)(v) [and 40 CFR 63.1957(b)] are satisfied. (9 VAC 5-80-110; 40 CFR 60, Subpart XXX; 40 CFR 63 Subpart AAAA; and Condition 2 of the NSR permit dated 10/08/2021)

- 5. **Landfill Requirements (Emission Unit ID# P01-L02) Limitations** The collection system shall be operated with negative pressure at each wellhead except under the conditions stipulated in 40 CFR 60.763(b)(1) (b)(3) [and 40 CFR 63.1958(b)(1) (b)(3). (40 CFR 60.763(b) and 40 CFR 63.1958(b))
- 6. **Landfill Requirements (Emission Unit ID# P01-L02) Limitations** As of September 27, 2021, the collection system shall be operated so that each interior wellhead has a landfill gas temperature less than 62.8 degrees Celsius (145 degrees Fahrenheit) in accordance with 40 CFR 63.1958(c)(1) and (2). Higher operating temperature values must be approved by the Piedmont Regional Office. (40 CFR 60.763(c) and 40 CFR 63.1958(c))
- Landfill Requirements (Emission Unit ID# P01-L02) Limitations Maintain the methane concentration at the surface of the landfill at less than 500 ppmv above the background level.
 (40 CFR 60.763(d) and 40 CFR 63.1958(d) and Condition 2f of the NSR permit dated 10/08/2021)
- 8. **Landfill Requirements (Emission Unit ID# P01-L02) Limitations** –The gas collection and control system shall be in operation at all times when the collected gas is routed to the system. The gas mover system shall be shut down and all valves in the collection and control system allowing atmospheric venting of LFG shall be closed within 1 hour if the collection or control system is inoperable. As of September 27, 2021, the gas collection and control system should be operated in accordance with 40 CFR 63.1959(b)(2)(iii). (9 VAC 5-80-110, 40 CFR 60.763(e) and (f), 40 CFR 63.1958(e) and (f); and Condition 6 of the NSR permit dated 10/08/2021)
- 9. **Landfill Requirements** (**Emission Unit ID# L02**) **Limitations** If monitoring demonstrates that the operational requirements in 40 CFR 60.763(b), (c), or (d) [and 40 CFR 63.1958(b), (c), or (d)] are not met, corrective action must be taken as specified in 40 CFR 60.765(a)(3) and (5) or (c) [and 40 CFR 63.1960(a)(3) and (5) or (c)]. If corrective actions are taken as specified in 40 CFR 60.765 [and 40 CFR 63.1960], the monitored exceedance is not a violation of the operational requirements of the gas collection and control system. (40 CFR 60.763(g) and 40 CFR 63.1958(g))
- 10. **Landfill Requirements (Emission Unit ID# L02) Limitations** The provisions of 40 CFR 60, subpart XXX [and 40 CFR 63 subpart AAAA] apply at all times, including periods of startup, shutdown or malfunction. During periods of startup, shutdown, and malfunction, the facility must comply with the work practice specified in 40 CFR 60.763(e) in lieu of the compliance provisions in 40 CFR 60.765. As of September 27, 2021, the gas collection and control system should be operated in accordance with 40 CFR 63.1958(e) in lieu of 40 CFR 63.1960. See Condition 8.
 - (9 VAC 5-80-110, 40 CFR 60.765(e), 40 CFR 63.1930(b))

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Monitoring

11. **Landfill Requirements - (Emission Unit ID# L02) - Monitoring** – As applicable, the permittee shall follow the monitoring requirements in accordance with 40 CFR 60.766 [and 40 CFR 63.1961] in addition to any DEQ-approved variances or alternative procedures. (9 VAC 5-80-110, 40 CFR 60.766, 40 CFR 63.1961, and Condition 11 of the NSR permit dated 10/08/2021)

Reporting

- 12. **Landfill Requirements (Emission Unit ID# L02) Reporting -** Reports shall be submitted, including, but not limited to:
 - a. NMOC Emission Report The permittee shall annually, except as provided in 40 CFR 60.767(b)(1)(ii) and (b)(3), submit a NMOC emission rate report to the Piedmont Regional Office meeting the requirements of 40 CFR 60.767(b) [and 40 CFR 63.1981(c)]. If required and supported, one copy of the NMOC emission report shall be submitted to the EPA at https://www3.epa.gov/ttn/chief/cedri/index.html, otherwise the report shall be submitted by mail. This initial report shall be submitted no later than 90 days after commencing construction on the MSW landfill horizontal/vertical expansion [Permitting note: Old Dominion has already satisfied this requirement and no longer must submit annual NMOC rate reports].
 - b. Collection and Control System Design Plan Revisions to the approved design plan shall be submitted for approval in accordance with 40 CFR 60.767(d)(1) and (2) [and 40 CFR 63.1981(e)]. As appropriate, a revised collection and control plan must be submitted according to 40 CFR 63.1981(d).
 - c. Closure Report A closure report must be submitted within 30 days of the permanent cessation of waste acceptance. A closure report must be submitted to the Administrator as provided in 40 CFR 60.767(e) [and 40 CFR 63.1981(f)]. If a closure report has been submitted, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4) [and 40 CFR 63.9(b) of Subpart A].
 - d. Equipment Removal Report An equipment removal report must be submitted within 30 days prior to removal or cessation of operation of the control equipment. The report shall include all information required in 40 CFR 60.767(f)(1) [and 40 CFR 63.1981(g)(1)] and any additional information requested under 40 CFR 60.767(f)(2) [and 40 CFR 63.1981(g)(2)].
 - e. Initial Performance Test Reports Initial performance test reports shall be submitted and shall include all information required in 40 CFR 60.767(h)(1)-(6) [and 40 CFR 63.1981(i)].

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f. Annual Report – If applicable, the permittee shall submit an annual report of the recorded information in paragraphs (1) through (7) of 40 CFR 60.767(g) following procedures in 40 CFR 60.767(i), if supported.

- g. Semi-Annual Reports Semi-annual reports shall be submitted that contain the information required in 40 CFR 63.1981(h)(1) through (8) following procedures in 40 CFR 63.1981(l), if supported.
- h. Corrective Action Reports Corrective action reports shall be submitted for corrective actions required in 40 CFR 60.765(a)(3)(iii) or (a)(5)(iii) [and 40 CFR 63.1960(a)(3) or (4)] and shall comply with 40 CFR 60.767(j)(1) and (2) [and 40 CFR 63.1981(j)(1) and (2)].
- i. Liquids Addition Annual reports shall be submitted in accordance with 40 CFR 60.767(k) if the permittee has employed leachate recirculation or added liquids based on a Research, Development, and Demonstration permit within the last 10 years.
- j. 24-Hour High Temperature Report In accordance with 40 CFR 63.1981(k) and any DEQ-approved variances, the permittee shall submit a notification within 24 hours to the Piedmont Regional Office if a wellhead gas temperature exceeds 76.7 degrees Celsius (170 degrees Fahrenheit) and the carbon monoxide measured is greater than or equal to 1,000 ppmv.

Each report shall be submitted to the Piedmont Regional Office. A copy of each report shall be submitted to EPA Region 3 (Email: **R3_APD_Permits@epa.gov**) unless authorized to be submitted electronically in accordance with 40 CFR 60.767(i) [and 40 CFR 63.1981(l)]. (9 VAC 5-80-110, 40 CFR 60.767, 40 CFR 63.1981, and Conditions 17, 18, 19, 20, and 21 of the NSR permit dated 10/08/2021)

Records

- 13. Landfill Requirements (Emission Unit ID# L01, L02) Recordkeeping The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
 - a. Records required in 40 CFR 60.768 [and 40 CFR 63.1983] (L02).
 - b. Readily accessible, on-site records of this MSW landfill capacity (L01, L02).
 - c. Annual calculated mass emission rate of NMOC from this MSW landfill (L02).
 - d. The current amount of solid waste in-place (L02).
 - e. The year-by-year or average waste acceptance rate (L02).
 - f. Site-specific values for CNMOC (concentration of NMOC, ppm by volume as hexane) and k (methane generation constant, per year), if obtained (L02).

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- g. Calculations detailing the estimated annual site-specific density and maximum design capacity (L02).
- h. Age of MSW landfill (L01, L02).
- i. Description, location, amount, and placement date of all non-degradable refuse, including asbestos and demolition refuse, and clean daily cover materials that are excluded from the waste acceptance rates in Condition 1 and from the LFG-generation calculations (L02).
- j. Installation date and location of all vents and/or gas collection components (L02).
- k. Current maximum design capacity, current amount of refuse in place, and year by year refuse accumulation rates (L02).
- 1. Date of first waste placement for Phases 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and Phase II lateral expansion (L02).
- m. Records sufficient to calculate the facility's emissions on a 12-month rolling basis (L02).
- n. Installation date and location of all newly installed wells, horizontal gas collectors, and surface gas collectors. (L02)
- o. Map or plot showing each existing and planned well, horizontal gas collector, and surface collector in the gas collection system with each well and collector uniquely identified (L02).
- p. Maximum expected gas generation flow rate calculated according to 40 CFR 60.765(a)(1) [and 40 CFR 63.1960(a)(1)](L02).
- q. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures listed in 40 CFR 60.769(a) [and 40 CFR 63.1962(a)] (L02).
- r. The monthly monitored gauge pressure, temperature, and nitrogen or oxygen concentration for each well (L02).
- s. The results from the monthly cover integrity monitoring and the date of cover repair (L02).
- t. The quarterly monitored methane concentration at the landfill surface and the surface monitoring plan developed for the quarterly monitoring which includes a topographic map with the monitoring route at 30-meter intervals and the rationale for any site-specific deviations from the required intervals (L02).
- u. All decommissioned wells and supporting documentation to show the reason for decommissioning each well (L02).
- v. Any inoperable periods for the collection or control systems and any instances where valves were closed to prevent the free venting of LFG (L02).

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w. A copy of the most recent approved gas collection and control system design plan (L02).

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9VAC 5-80-110, 40 CFR 60.768, 40 CFR 63.1983, and Condition 16 of the NSR permit dated 10/08/2021)

Fuel Burning Equipment Requirements

(Emission Unit ID# PCD-01, PCD-02, PCD-05)

Limitations

- 14. **Fuel Burning Equipment Requirements (Emission Unit ID# PCD-01, PCD-02 and PCD-05) Limitations** The approved fuel for the open flares (PCD-01, PCD-02 and PCD-05) is LFG. Each flare may also use propane gas or natural gas to ignite the pilot flame in each flare. A change in fuel may require a permit to modify and operate. (9 VAC 80-110 and Condition 7 of the NSR permit dated 10/08/2021)
- 15. Fuel Burning Equipment Requirements (Emission Unit ID# PCD-01, PCD-02 and PCD-05) Limitations The open flares (PCD-01, PCD-02, and PCD-05) shall consume no more than 1,329,730 MMBtus of LFG combined per year, calculated monthly as the sum of each consecutive 12-month period. The net heat content of the LFG to each flare shall be calculated monthly based on methane concentrations readings obtained with a calibrated field instrument and an assumed methane heat content of 1,012 Btu/scf. At least one methane concentration reading per month for each flare is required. If multiple readings are taken in a month, the average methane concentration value will be used to calculate net heat content for that month. Net content and totalized flow for the month will then be used to calculate total monthly heat input to each flare.
 - (9 VAC 80-110 and Condition 8 of the NSR permit dated 10/08/2021)
- 16. **Fuel Burning Equipment Requirements (Emission Unit ID# PCD-01, PCD-02 and PCD-05) Limitations** All open flares (PCD-01, PCD-02 and PCD-05) shall be operated with no visible emissions, as determined by EPA Method 22, except for periods not to exceed a total of 5 minutes during two consecutive hours. At all times, including periods of startup, shutdown and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. (9 VAC 80-110 and Condition 9 of the NSR permit dated 10/08/2021)
- 17. **Fuel Burning Equipment Requirements (Emission Unit ID# PCD-01 and PCD-02) Limitations** Emissions from each of the 3,500 scfm John Zink (PCD-01 and PCD-02) open flares shall not exceed the limits specified below:

Particulate Matter 1.9 lbs/hr (9 VAC 5-50-260)

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PM_{10}	1.9 lbs/hr	(9 VAC 5-50-260)
$PM_{2.5}$	1.9 lbs/hr	(9 VAC 5-50-260)
Sulfur Dioxide	1.8 lbs/hr	(9 VAC 5-50-260)
Nitrogen Oxides	7.9 lbs/hr	(9 VAC 5-50-260)
Carbon Monoxide	42.7 lbs/hr	(9 VAC 5-50-260)
Non-Methane Organic Compounds	0.2 lbs/hr	(9 VAC 5-50-260)
Volatile Organic Compounds	0.2 lbs/hr	(9 VAC 5-50-260)

Emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 14, 21, and 23.

(9 VAC 5-80-110 and Condition 12 of the NSR permit dated 10/08/2021)

18. **Fuel Burning Equipment Requirements - (Emission Unit ID# PCD-05) - Limitations** - Emissions from the 1,200 scfm open flare (PCD-05) shall not exceed the limits specified below:

Particulate Matter	3.9 lbs/hr	(9 VAC 5-50-260)
PM_{10}	3.9 lbs/hr	(9 VAC 5-50-260)
PM _{2.5}	3.9 lbs/hr	(9 VAC 5-50-260)
Sulfur Dioxide	0.6 lbs/hr	(9 VAC 5-50-260)
Nitrogen Oxides	8.8 lbs/hr	(9 VAC 5-50-260)
Carbon Monoxide	22.0 lbs/hr	(9 VAC 5-50-260)
Volatile Organic Compounds	2.4 lbs/hr	(9 VAC 5-50-260)

Emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 14 and 22.

(9 VAC 5-80-110 and Condition 13 of the NSR permit dated 10/08/2021)

19. **Fuel Burning Equipment Requirements - (Emission Unit ID# PCD-01 and PCD-02) - Limitations** – Combined emissions from the operation of the two 3,500 scfm John Zink open flares (PCD-01 and PCD-02) and the 1,200 cfm open flare (PCD-05) shall not exceed the limits specified below:

Particulate Matter

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PM_{10}	11.2 tons/yr (9 VAC 5-50-260)
PM _{2.5}	11.1 tons/yr (9 VAC 5-50-260)
Sulfur Dioxide	10.1 tons/yr (9 VAC 5-50-260)
Nitrogen Oxides	45.2 tons/yr (9 VAC 5-50-260)
Carbon Monoxide	246.0 tons/yr (9 VAC 5-50-260)
Non-Methane Organic Compounds	3.4 tons/yr (9 VAC 5-50-260)
Volatile Organic Compounds	1.3 tons/yr (9 VAC 5-50-260)

Emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 14, 15, 21, 22, and 23.

(9 VAC 5-80-110 and Condition 14 of the NSR permit dated 10/08/2021)

Monitoring

- 20. **Fuel Burning Equipment Requirements (Emission Unit ID# PCD-01, PCD-02) - Monitoring** In order to comply with the requirements of 40 CFR 60.762(b)(2)(iii)(A) [and 40 CFR 63.1959(b)(2)(iii)(A)], the heat sensing and flow recording devices in 40 CFR 60.766(c) [40 CFR 63.1961(c)] must be installed, calibrated, maintained, and operated according to the manufacturer's specifications and 40 CFR 60.766(c) [and 40 CFR 63.1961(c)]
 - (9 VAC 5-80-110, 40 CFR 60.766(c) and 40 CFR 63.1961(c))
- 21. **Fuel Burning Equipment Requirements (Emission Unit ID# PCD-01, PCD-02) Monitoring -** The John Zink open flares (PCD-01 and PCD-02) shall be subject to the following requirements listed in 40 CFR 60.18 [and 40 CFR 63.11]:
 - a. A non-assisted flare type shall be installed.
 - b. The net heating value for the LFG being combusted shall be 200 Btu/scf or greater and determined according to methods listed in 40 CFR 60.18(f)(3) or other methods approved by EPA, Region III. For compliance with 40 CFR 63.11, the non-assisted flares may comply with the heat content specifications of 40 CFR 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR 63.11(b)(7), or by complying with the requirements of 40 CFR 63.11(b)(6)(i).
 - c. The exit velocity shall be less than 60 ft/sec except when the net heating value for the LFG is greater than 1,000 Btu/scf or the exit velocity is less than V_{MAX} and less than 400 ft/sec. The exit velocity shall be determined using the applicable methods listed in 40 CFR 60.18(f)(4) and 40 CFR 60.18(f)(5) [and 40 CFR 63.11(b)(7)] or methods approved by EPA, Region III.

- d. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, shall be installed at the open flares' pilot light or the flame itself to indicate the continuous
- e. A gas flow-meter shall be installed, calibrated, and maintained to record the LFG flow to the open flares at minimum every 15 minutes.
- (9 VAC 5-80-110, 40 CFR 60.766(c), 40 CFR 63.1961(c), and Condition 3 of the NSR permit dated 10/08/2021)
- 22. **Fuel Burning Equipment Requirements (Emission Unit ID# PCD-05) Monitoring**Flame presence for the open flare PCD-05 shall be monitored using thermocouples or any equivalent device. The permittee shall monitor the PCD-05 flare on a weekly basis to ensure it is operated and maintained in conformance with manufacturer's specifications. (9 VAC 80-110 and Condition 2e of the NSR permit dated 10/08/2021)
- 23. **Fuel Burning Equipment Requirements (Emission Unit ID# PCD-01, PCD-02) Monitoring -** The two John Zink open flares (PCD-01 and PCD-02) shall each operate within the following parameters to ensure that the vendor-guaranteed carbon monoxide emission factor of 0.37 lb/MMBtu is met (except during startup and shut down):
 - a. A LFG flow rate from 200 scfm (minimum) to 3500 scfm (maximum).
 - b. A heat input of 115.5 MMBtu/hr.

presence of a flame.

- c. A methane concentration in the LFG from 30% (minimum) to 70% (maximum).
- (9 VAC 5-80-110 and Condition 4 of the NSR permit dated 10/08/2021)
- 24. Fuel Burning Equipment Requirements (Emission Unit ID# PCD-01, PCD-02 and PCD-05) Monitoring The permittee shall perform a monthly visible emission observation of the open flares (PCD-01, PCD-02, and PCD-05) that have been in operation. If such periodic observations indicate any visible emissions, the permittee shall take appropriate action, immediately, to return the unit to normal operation such that no visible emissions exist. If such corrective action fails to eliminate visible emissions, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 22 (reference 40 CFR, Appendix A). If a Method 22 evaluation and/or corrective action become necessary, the permittee shall record the details of the incident in a logbook. The logbook shall be kept on site and available for inspection by the DEQ for the most recent five year period. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that stack until the stack shows no emissions for a month.

(9VAC 5-80-110 and Condition 10 of the NSR permit dated 10/08/2021)

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Records

- 25. Fuel Burning Equipment Requirements (Emission Unit ID# PCD-01, PCD-02 and PCD-05) Recordkeeping The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
 - a. The annual throughput of LFG to the open flares (PCD-01, PCD-02, PCD-05), in MMBtus/year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. The permittee shall maintain a visible emissions observation log required by Condition 24. The log shall include the dates and times of the observations, type of operations, whether or not there were visible emissions, any VEE recordings, and necessary corrective actions.
 - c. Records of thermocouples or heat sensors required by Conditions 21 and 22 to demonstrate the presence of a flame in the open flares (PCD-01, PCD-02, PCD-05).
 - d. All performance test and pilot flame or flare flame monitoring records required by 40 CFR 60.768(b)(4) [and 40 CFR 63.1983(b)(4)] for the John Zink (or equivalent) open flares (PCD-01, PCD-02).
 - e. The type of open flare (i.e. steam-assisted, air-assisted, or non-assisted) used, the heat content determination, gas flow rate measurements, and exit velocity determinations made during the required performance tests listed in Condition 21 for the John Zink (or equivalent) open flares (PCD-01 and PCD-02).
 - f. All periods of operations when LFG is being vented to the open flare during which the pilot flame or flare flame is absent for the open flare (PCD-01 and PCD-02).
 - g. A copy of the manufacturer's specifications listing the maximum capacity for the odor control flares on-site (PCD-05).
 - h. Records of maintenance, operating procedures, and training as required by Condition 30 (PCD-01, PCD-02, PCD-05).

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(VAC 5-80-110, 40 CFR 60.768(b)(4), 40 CFR 63.1983(b)(4), and Condition 16 of the NSR permit dated 10/08/2021)

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Testing

26. Fuel Burning Equipment Requirements - (Emission Unit ID# PCD-01, PCD-02) -

Testing - The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using the appropriate methods. Test ports shall be provided at the appropriate locations.

(9 VAC 5-80-110 and Condition 22 of the NSR permit dated 10/08/2021)

Emergency Generator

(Emission Unit ID# EG-5)

Federal Requirements

27. Emergency Generator Requirements (Emission Unit ID# EG-5) - Federal Requirements – Except where this permit is more restrictive than the applicable requirement, the emergency diesel generator (EG-5) is subject to 40 CFR 63 MACT Subpart ZZZZ and is subject to applicable requirement under 40 CFR 60 NSPS Subpart IIII. The facility shall notify the Administrator of the installation or replacement or modification of any diesel engine on site. This may result in the applicability of additional requirements under 40 CFR 60 NSPS Subpart IIII or NSPS Subpart JJJJ and/or 40 CFR 63 MACT Subpart ZZZZ.

(VAC 5-80-110 and 40 CFR 40 CFR 63.6590)

28. Emergency Generator Requirements (Emission Unit ID# EG-5) - Federal Requirements – Except where this permit is more restrictive than the applicable requirement, the emergency diesel generator (EG-5, model year 2008, diesel emergency engine rated at 250 kW/372 bhp located at an area source of HAP) is subject to the requirements of NSPS Subpart IIII and MACT Subpart ZZZZ, as follows:

Citation	Requirement
40 CFR 60.4205(b)	[as per 40 CFR 60.4202(a)(2)] Certification to meet the emission standards for non-
	road engines in Table 1 of 40 CFR 89.112 (4 g/kW-hr of NMHC+NOx and 3.5 g/kW-
	hr of CO) and the opacity limits in 40 CFR 89.113.
40 CFR 60.4207	Meet the fuel requirements in 40 CFR 1090.305 of a maximum of 15 ppm sulfur
	content
40 CFR 60.4209 and	Monitoring requirements: Install non-resettable hour meter on the engine if it does
40 CFR 60.4211	not meet the standards applicable to non-emergency engines in 40 CFR 60.4210.
	Purchase an engine certified to the emission standards in 40 CFR 60.4205(b) and
	install, operate, and maintain the engine as per manufacturer's emission-related
	instructions. Operate the emergency unit as per 40 CFR 60.4211(f)(1) to (f)(3) or it
	will be considered a non-emergency unit.
40 CFR 60.4218	Special provisions in Table 8.
40 CFR 63.6590(c)	Meeting the requirements of NSPS Subpart IIII will meet the requirements of MACT
	Subpart ZZZZ.

(9 VAC 5-80-110; 40 CFR 60, Subpart IIII; and 40 CFR 63, Subpart ZZZZ)

Facility Wide Limitations

- 29. **Facility Wide Requirements Fugitive Dust and Fugitive Emissions Controls -** Unless otherwise specified, fugitive dust and emission controls shall include the following or equivalent as a minimum:
 - a. Dust from grading, cell construction, waste compaction, and application of daily cover, wood waste chipping operations, storage piles and traffic areas shall be controlled by wet suppression or equivalent control measures approved by the Director, Piedmont Region.
 - b. All material being stockpiled shall be kept moist to control dust during storage and handling, or shall be covered to minimize emissions, or shall be controlled by equivalent measures approved by the Director, Piedmont Region.
 - c. Dust from haul roads shall be controlled by wet suppression and prompt removal of dried sediment resulting from soil erosion and dirt spilled or tracked onto paved surfaces within the landfill.
 - d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.
 - (9 VAC 5-80-110 and Condition 5 of the NSR permit dated 10/08/2021)
- 30. **Facility Wide Requirements Maintenance/Operating Procedures** At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Maintain an inventory of spare parts.
 - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
 - e. Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
 - (9 VAC 5-80-110 and Condition 26 of the NSR permit dated 10/08/2021)

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Insignificant Emission Units

31. **Insignificant Emission Units** -The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

	tion as insignificant emis			Datad Canacity
Emission Unit No.		Citation	Pollutant(s) Emitted	Rated Capacity
02A	Description Leachate Fixed Roof	5-80-720 B 2	(5-80-720 B) VOC, NMOC	(5-80-720 C) 516 cubic meters
02A		3-80-720 B 2	VOC, NMOC	316 cubic meters
02B	Storage Tank A Leachate Fixed Roof	5-80-720 B 2	VOC, NMOC	516 cubic meters
02 D	Storage Tank B	3-80-720 B 2	VOC, NWIOC	310 cubic fileters
02C	Leachate Fixed Roof	5-80-720 B 2	VOC, NMOC	1,892 cubic meters
02C	Storage Tank C	3-80-720 B 2	VOC, NWIOC	1,892 cubic meters
	including Aeration and			
	mixing system			
02D	Leachate Fixed Roof	5-80-720 B 2	VOC, NMOC	1892 cubic meters
020	Storage Tank D	3 00 720 B 2	VOC, INVIOC	10)2 cubic meters
	including Aeration and			
	mixing system			
T-1	New and Used Fuel Oil	5-80-720 B 2	VOC	250 gallons
1 1	Storage Tank	3 00 720 112	100	250 50110115
T-2	New and Used Fuel Oil	5-80-720 B 2	VOC	250 gallons
	Storage Tank	0 00 720 2	, 30	250 gainons
T-3	New and Used Fuel Oil	5-80-720 B 2	VOC	250 gallons
- 0	Storage Tank	0 00 720 2 2	, 55	200 ganons
T-4	New and Used Fuel Oil	5-80-720 B 2	VOC	250 gallons
	Storage Tank			<i>S. S. S</i>
T-5	New and Used Hydraulic	5-80-720 B 2	VOC	250 gallons
	Fluid Storage Tank			
T-6	New and Used Hydraulic	5-80-720 B 2	VOC	250 gallons
	Fluid Storage Tank			
T-7	New and Used Hydraulic	5-80-720 B 2	VOC	250 gallons
	Fluid Storage Tank			
T-8	New and Used Hydraulic	5-80-720 B 2	VOC	250 gallons
	Fluid Storage Tank			
T-9	Mobile Diesel Fuel	5-80-720 B 2	VOC	500 gallons
	Tanker			
T-10	Mobile Diesel Fuel	5-80-720 B 2	VOC	500 gallons
	Tanker			
EG 1-4	Existing	5-80-720 B 2	NOx, CO, SO ₂ , PM,	Less than 75 kW total
	Portable/Standby Diesel		PM_{10} , $PM_{2.5}$, VOC	
	Electric Generators			
EP 1-4	Existing	5-80-720 B 2	NOx, CO, SO ₂ , PM,	Less than 75 kW total
	Portable/Standby Diesel		PM_{10} , $PM_{2.5}$, VOC	
	Pumps			
EL 1-4	Existing	5-80-720 B 2	NOx, CO, SO ₂ , PM,	Less than 75 kW total
	Portable/Standby Diesel		PM_{10} , $PM_{2.5}$, VOC	
	Lighting			
SF-1	Solar flares	5-80-720 B 2	NOx, CO, SO ₂ , PM,	Less than 6.0
through			PM_{10} , $PM_{2.5}$, VOC	MMBtu/hr each
SF-6				

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These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, record keeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110. (9 VAC 5-80-110)

Permit Shield & Inapplicable Requirements

32. **Permit Shield and Inapplicable Requirements -** Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
9 VAC 5-40-5800	Emission Standards and	These regulations only apply to municipal
and 40 CFR 60	Emission Guidelines for	solid waste landfills which commenced
subpart Cc	Sanitary Landfills	construction, reconstruction or modification
	-	before May 30 1991.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-110 and 9 VAC 5-80-140)

General Conditions

- 33. **General Conditions Federal Enforce**ability All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

 (9 VAC 5-80-110 N)
- 34. **General Conditions Permit Expiration** The following shall apply:
 - a. This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
 - b. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

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- c. If an applicant submits a timely and complete application for an initial permit or renewal under 9 VAC 5-80-80 F, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- d. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- e. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- f. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)

- 35. **General Conditions -Recordkeeping and Reporting** All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

36. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-110 F)

- 37. **General Conditions -Recordkeeping and Reporting -** The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedance of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

- 38. **General Conditions Annual Compliance Certification** Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
 - b. The identification of each term or condition of the permit that is the basis of the certification.
 - c. The compliance status.
 - d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

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- e. Consistent with subsection 9 VAC 5-80-110 the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- f. Such other facts as the permit may require to determine the compliance status of the source, and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9 VAC 5-80-110)

- 39. **General Conditions Permit Deviation Reporting** The permittee shall notify the Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 37 of this permit. (9 VAC 5-80-110 F.2)
- 40. **General Conditions Failure/Malfunction Reporting** In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, no later than four daytime business hours after the malfunction is discovered, notify the Piedmont Regional Office of such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Piedmont Regional Office.

 (9 VAC 5-20-180 and 9 VAC 5-20-180)
- 41. **General Conditions Severability** The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9 VAC 5-80-110)
- 42. **General Conditions Duty to Comply** The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for

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enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application. (9 VAC 5-80-110)

43. **General Conditions - Need to Halt or Reduce Activity not a Defense** -It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110)

44. **General Conditions - Permit Modification** -A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-110, 9 VAC 5-80-190 and 9 VAC 5-80-260)

45. General Conditions - Property Rights - The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110)

46. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-110)

- 47. **General Conditions Duty to Submit Information** Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G. (9 VAC 5-80-110)
- 48. **General Conditions Duty to Pay Permit Fees** The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees, as applicable, consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 and annual permit maintenance fees, as applicable, consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350.

(9 VAC 5-80-110, 9 VAC 5-80-310 et seq., and 9 VAC 5-80-2310 et seq.)

49. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other

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person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-80-110 and 9 VAC 5-50-90)

- 50. **General Conditions Startup, Shutdown, and Malfunction** At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

 (9 VAC 5-80-110 and 9 VAC 5-50-20 E)
- 51. **General Conditions Alternative Operating Scenarios** Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110)

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- 52. **General Conditions Inspection and Entry Requirements** The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
 - a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110)

- 53. **General Conditions Reopening for Cause** The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:
 - a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110)

54. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-110 and 9 VAC 5-80-150)

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- 55. **General Conditions Transfer of Permits** The conditions for transfer of a permit are as follows:
 - a. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
 - b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
 - c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
 - (9 VAC 5-80-110 and 9 VAC 5-80-160)
- 56. General Conditions Permit Revocation or Termination for Cause A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
 - (9 VAC 5-80-110, 9 VAC 5-80-190 C and 9 VAC 5-80-260)
- 57. **General Conditions Duty to Supplement or Correct Application** Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9 VAC 5-80-110 and 9 VAC 5-80-80 E)
- 58. **General Conditions Stratospheric Ozone Protection** If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (9 VAC 5-80-110 and 40 CFR Part 82)
- 59. **General Conditions Asbestos Requirements** The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following:

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Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150). (9 VAC 5-80-110 and 9 VAC 5-60-70)

- 60. **General Conditions Accidental Release Prevention** If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (9 VAC 5-80-110 and 40 CFR Part 68)
- 61. **General Conditions Changes to Permits for Emissions Trading** No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

 (9 VAC 5-80-110 I)
- 62. **General Conditions Emissions Trading** Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
 - a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110)

State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

63. **Odor Management Plan:** The Odor Management Plan shall incorporate the use of best available odor control technology that is appropriate for this landfill. The plan shall also describe procedures that will be implemented in response to citizen odor complaints or the detection of significant off-site odors by DEQ staff, including progressive steps that will be taken to reduce odors. A log of all odor complaints received and actions taken shall be kept and made available for inspection by authorized Federal, State or Local officials. A copy of the log entries for each semi-annual period (January-June and July-December) shall be sent to the Piedmont Regional Office, with the Title V semi-annual report. The Odor Management Plan shall be reviewed annually by the permittee and evaluated for the need

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and feasibility of new or modified odor control technology or practices. The results of this review and a modified plan (if applicable) shall be submitted to the Director, DEQ Piedmont Regional Office, by March 1st of each year with the other 40 CFR 60 NSPS Subpart WWW (XXX) and 40 CFR 63 NESHAP Subpart AAAA reports.

(9 VAC 5-50-130 and Condition 32 of the NSR permit dated 10/08/2021)